



from the Author

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E S S A Y

O N

L O N G E V I T Y.

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ESSAY

ON LONGEVITY.

INTRODUCTION.

THE means of preserving health, and of attaining great age, are subjects which seem to be well-entitled to the peculiar attention of every thinking man. In regard to the former, there is no question: the pleasure that arises from the possession of health, and the distress which sickness occasions, are perpetual mementos that health cannot be neglected. But as to the latter, the propriety of aspiring to long life has been doubted; and it is said, that after a person has lived for 50 or 60 years, and has fulfilled his duties as a man, that he had better retire to make way for others, and that the sooner he quits these sublunary scenes the better. Such sentiments, however, ought not to be indulged. If persons lived only for themselves, and for the gratification of their own passions, and to promote their own interests alone, this might be the case. But if we live, as we ought to do, to promote the happiness of others as well as of our own, and if by living long, we can be of more service, from the knowledge which greater experience, and longer observation must necessarily furnish, the result is, that we ought to live as long as we have health and strength to perform good actions to others, and that the power of doing good, ought to be the proper limit by which our wishes for existence ought to be bounded;

nor ought it to be omitted, that there is an evident and necessary connection between good health and longevity, as it is impossible to possess the one, without its contributing to the enjoyment of the other.

In sketching out some observations on this important subject, it is my intention to state, 1. The circumstances which tend to promote longevity. 2. The rules which have been adopted by those who have attained great age. 3. The peculiar description of countries most remarkable for long life; and, 4. To add some tables of longevity and the duration of human life.

I. Circumstances tending to promote Longevity.

The circumstances tending to promote longevity may be considered under the following general heads:—

1. Climate. 2. Form of the individual. 3. Parentage. 4. Natural disposition. 5. Situation in life. 6. Professions. 7. Exercise, or labour. 8. Connubial connections. 9. Sex; and, 10. Renewal of age.

1. *Climate.* In the first place, climate seems to be of considerable importance; and it may be laid down as a general rule, that the moderate, or even the coldest climates, are the most favourable to long life. Heat seems to relax and enfeeble, cold to strengthen and brace, the human frame. The diet also of hot countries is not so nourishing as that of cold*; and there is in general a greater disposition, and greater opportunities to indulge in various excesses in the former, than in the latter. But if the climate be cool; a rainy atmosphere seems to be less unfavourable to longevity

* In cold countries they live more upon animal, in hot countries upon vegetable, food, and fruits. A judicious mixture of both is the best plan to pursue, but of the two, animal food is the most nourishing.

than could well be imagined ; for Ireland, which is a wet country, boasts of a great number of old people. And a very large proportion of the aged who have lived in England and Scotland, have resided in the western, and, consequently, the rainiest counties in the island*.

2. *Form.* The next circumstance to be considered is, the form and size of the individual. It is generally admitted, that persons of a compact shape, and of a moderate stature, are the most likely to live long. Height often originates from the disproportioned growth of some particular part of the body, which necessarily has a tendency to engender weakness and disease. Tall persons also are apt to acquire a habit of stooping, which contracts the chest, and is a great enemy to free respiration ; whereas the short-sized find little difficulty in keeping themselves erect, and are naturally much more active, by which the animal functions are retained in a state of much greater perfection. The only disadvantage attending a short stature is, that it is frequently accompanied with corpulence, which is rather unfavourable to long life.

3. *Parentage.* Being born of healthy parents, and exempted from hereditary disease, are circumstances evidently favourable to longevity. A puny frame, like Cornaro's, may, by the greatest care and anxiety, be preserved in existence ; but those who inherit health and strength, and are born with robust constitutions, can

* Moisture, it would appear, is not prejudicial to health, if it does not affect the purity of the air. Even stagnated water, if in peat bogs or morasses, is not unwholesome, as the water, by the astringency of the peat, is prevented from becoming putrid. Lincolnshire, also, and several of the marshy counties of England, can produce a number of instances of great age, but probably they were from the more elevated parts of these districts.

alone expect not only to live long, but to enjoy the pleasures and comforts of life, whilst they continue to possess it.

4. *Natural disposition.* Longevity also seems to depend much upon good temper, mixed at the same time with a cheerfulness of disposition, or good spirits*. Neither the irascible, nor those who, from despondency, sink under the crosses of life, can expect to live long. Even those who suffer their strength and spirits to be exhausted by severe study, or other mental exertions, seldom reach great age. In the long list of 1712 persons who lived about a century, Fontenelle, (who did not quite reach 100 years,) is the only author of any note; and his great age is ascribed to the tranquil ease of his temper, and that liveliness of spirits for which he was much distinguished; for he retained to the last *the youth of old age*, as the French happily express it.

5. *Situation in life.* It is commonly observed, “that it is not the rich and great, not those who depend on medicines, who become old, but such as use much exercise, are exposed to the fresh air, and whose food is plain and moderate†.” And it is certain that persons of that description, in general, stand the best chance of living long. At the same time, though instances of old age in great and noble personages are not often to be met with, yet they may be as many, *in proportion to the smaller number of such persons*, as those in the lower but more numerous classes of society. Nor is there any thing inconsistent in power, rank, or wealth, being accompanied with a long period of existence, provided other circumstances are favourable to longevity.

* Hence the great age to which many of the French nobility lived, particularly before the regency of Orleans.

† See Easton on Human Longevity, Introduction, p. 11.

6. *Professions.* In the next place, it is evident that long life must depend much on the manner in which the individual is employed. Unhealthy occupations generally become fatal. Yet Peter Prin, a glass-blower, is said to have attained the great age of 101; and John Tyler, a miner at Leadhills, in Scotland, is supposed to have reached even 132 years *. His age, indeed, could not be proved by direct, but it rests on very strong circumstantial, evidence; and a person of the most undoubted authority, (Dr. Walker, Professor of Natural History in the University of Edinburgh,) informs me, “that in his muscles, joints, and in his whole conformation and aspect, he wore the appearance of more remote antiquity than he had ever seen in any human creature.” But on the whole, farmers, gardeners, and labourers in the country, are in general the longest lived. Foot soldiers also, who have survived the dangers of war, are remarkable for long life. They are generally stout and vigorous men, and the regularity to which surviving soldiers must have accustomed themselves, whilst the careless and disorderly drop off, the erect posture to which they have been trained, and being of course men well formed by nature, and habituated to march and walk well, (which familiarizes them to a natural and healthy exercise,) all combine in their favour.

7. *Exercise or labour.* It is also proper to remark, that not only moderate exercise, but even labour, if not too severe, contributes to good health and old age. In many instances, persons have worked at threshing, and

* It is said that neither of these instances ought much to be wondered at, as a glass-blower is constantly exposed to fresh and dry air, and the labour of miners under ground is not for many hours, and they generally reside in hilly districts.

other laborious occupations, exposed to a current of fresh air, after they had passed beyond the age of 100, and, if accustomed to them, they do not appear to have suffered any inconvenience from such exertions.

8. *Connubial connections.* Nor ought it to be omitted, that a large proportion of the long-lived, have preferred a married to a single state, and in general have left behind them a numerous family. Whether a life of celibacy occasions disease, or leads to irregularity, or sours the temper, or to whatever other cause it ought to be attributed, may be a subject of dispute, but it is certain, that the number of single persons who live long, bear no proportion to the married*.

9. *Sex.* Farther, though a greater number of males are born than of females, at least in European countries, yet there is reason to believe, that of the two sexes, women reach old age in the greatest proportion. For this various causes may be assigned, as the greater regularity and temperance of their mode of living, their being less exposed to dangers and hardships, less subject to violent agitations, and generally endowed with more cheerfulness and gentleness of disposition.

10. *Renewal of youth.* In the last place, among the symptoms of longevity, none is more striking than when Nature seems to renew itself, by producing, even in old age, new teeth, new hair, &c. but the instances of this are extremely rare.

II. *Rules tending to promote long Life.*

We shall now proceed to state such rules as have been followed by those who have attained great age, as

* This applies to both sexes, in particular to the male. Dr. Rush of Philadelphia asserts, that he never saw but one unmarried man exceed fourscore years.

they may furnish some hints that may be serviceable to others.

The plan laid down by the celebrated Cornaro, is well known, and the abstemious manner in which he lived, has often been recommended to the imitation of others ; but I question much whether many would wish to lead the same life, for the sake of mere existence. Life is no longer desirable than whilst it can be enjoyed with some degree of satisfaction, and it is of little consequence, if a person merely vegetates, whether he lives or not.

Without entering therefore into various particulars, fitter for the discussions of experimental philosophy, than for real life, (as weighing the food taken, &c. &c.) we shall proceed to mention the rules which have been found the most effectual, and which are the most likely to be carried into practice. They may be classed under the following heads :—1. Food. 2. Clothing. 3. Habitation. 4. Labour or exercise. 5. Habits or customs. 6. Medicine ; and, 7. Disposition of mind.

1. *Diet.* The importance of wholesome food, for the preservation of health and long life, and the avoiding of excess, whether in eating or drinking, need not be dwelt upon. Some instances, indeed, are mentioned of persons who have continued to commit excesses, and have lived long ; but these are to be considered in no other light than as exceptions from a general rule ; and it may reasonably be contended, that if such persons lived to a great age, notwithstanding their intemperance, they would have lived much longer had they followed a different course.

2. *Clothing.* It is equally unnecessary to detail at any length, the necessity of warm clothing, more especially in advanced life, and during the cold seasons, as

the best mode of preventing a number of diseases to which old men are particularly exposed, and which, by no other means, can be avoided.

3. *Habitation.* The health of every individual must greatly depend on the place where he resides, and the nature of the house which he inhabits; and as it has frequently been remarked, that the greatest number of old people die in winter, and that many individuals, in a weak and consumptive state, are obliged to fly to warmer climates as the only means of safety, it has thence occurred to Dr. Pearson, that it would be of service both to the aged and to the consumptive, to have houses erected, of such a peculiar construction that the air could always be preserved, not only pure, but nearly of the same, and of rather an elevated temperature, so that the invalids who resided in them should never be affected by the vicissitudes of the seasons. Such an idea, it must be admitted, cannot be a general remedy or resource, but it is well entitled to the attention of those who are in affluent circumstances, by some of whom, it is to be hoped, an hospital for the aged and the consumptive will be erected, and the experiment fairly tried, both for their own sakes, and for that of human nature in general.

4. *Exercise and labour.* That either exercise or moderate labour is necessary even to aged persons, for the purpose of preserving the human frame in order, can hardly be questioned, provided any great exertion is avoided, than which nothing is more likely to destroy the springs of life, particularly when these become feeble. Travelling in moderation also, from the change of air and scene, has been found of great use.

5. *Habits and customs.* In the next place, good health, and consequently longevity, depends much on

personal cleanliness, and a variety of habits and customs, or minute attentions, which it is impossible here to discuss. It were much to be wished, that some author would undertake the trouble of collecting the result of general experience upon that subject, and would point out those habits, which, taken singly, appear very trifling, yet when combined, there is every reason to believe, that much additional health and comfort would arise from their observance.

6. *Medicine.* It is a common saying, that every man, after the age of 40, should be his own physician. This seems, however, to be a dangerous maxim. The greatest physicians, when they are sick, seldom venture to prescribe for themselves, but generally rely on the advice of their medical friends. Persons who pretend to be their own physicians, are generally much addicted to quackery, than which nothing can be more injurious to the constitution. It is essential to health, that medicines should never be taken but when necessary, and never without the best advice, in regard to the commencement, which ought not to be too long delayed, otherwise much benefit cannot be expected from them, and also with respect to nature or sort, quantity, and continuance.

At present, the powers of physic, it is generally acknowledged, are extremely bounded. The medical art, however, is probably still in its infancy, and it is impossible yet to say, to what perfection it may reach, not only in consequence of the new improvements which chemistry daily furnishes, but also of those which may be made, by the discovery of new and valuable plants, in countries either already known or hitherto unexplored, and indeed the new uses to which old medicinal plants may be applied. Perhaps such discoveries will be much accelerated, when, instead of being left to the

zeal and industry of individuals, they shall meet with that public encouragement and protection, to which they are so peculiarly well entitled.

7. *Disposition of mind.* In the last place, nothing is more conducive to longevity than to preserve equanimity and good spirits, and not to sink under the disappointments of life, to which all, but particularly the old, are necessarily subjected. Indeed, this is a point which cannot be too much inculcated, for experience sufficiently demonstrates, that many perish from despondency, who, if they had preserved their spirit and vigour of mind, might have survived many years longer.

III. *Countries remarkable for Longevity.*

The countries the most remarkable for long life are those of a hilly nature. We are informed by Pallas, that the inhabitants of the mountainous districts of the province of Isek, in the northern parts of Siberia, live to a great age; that people of 100 years are very common; and that he saw an invalid soldier aged 120. The inhabitants of the plains in their neighbourhood, are, at the same time, by no means so healthy or so long lived. Buffon places the mountainous districts of Scotland at the head of a list containing those parts of Europe the most distinguished for longevity; and, indeed, there is no country in Europe, where, in proportion to its population, a greater number of individuals reach to 60, and thence to 80, and even 90 years of age, in full possession of all their faculties, both personal and mental, than is the case in that part of Great Britain*.

There

* In a work containing a collection of instances of longevity, for no less a period than 1733 years, namely, from A. D. 1066 to 1799, (by J. Easton) in which there is given the name, age, place of residence, &c. of 1712 persons, from all parts of the world, who had attained to a century and upwards, 170 are stated to have been natives

There is also every reason to believe, that many of the departments of France and the mountainous districts of Germany, Hungary, Sweden, Norway, and even those of Spain, Portugal, Italy, and America, will produce extraordinary instances of longevity, whenever any particular enquiry is made regarding that interesting circumstance.

IV. *Tables of Longevity.*

Having thus discussed the subject of Longevity in general, it may not be improper to lay before the reader the following table, explaining the shortness of human life, and pointing out how few there are, in proportion to the number born, who reach even the period of 60 years *.

Of a hundred men who are born, there die, according to Hufeland,

Under	10	-	-	-	50
Between 10 and 20		-	-	-	20
20 and 30		-	-	-	10
30 and 40		-	-	-	6
40 and 50		-	-	-	5
50 and 60		-	-	-	3
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tives of Scotland, and the two most remarkable in the whole list, are Kentigern, a native of Scotland, and Peter Torton of Temeswar, in Hungary, both of whom attained the great age of 185 years. This Kentigern, also known under the name of St. Mungo, was the founder of the Bishopric of Glasgow. The following verses were made on his extraordinary age and place of interment :

“ Cum octogenos centum quoque quinque vir annos

“ Complerat, Sanctus est Glasgow funere functus.”

Spottiswood's Hist. of the Church of Scotland, p. 111, & 112.

* On the Art of prolonging Human Life ; a work written by Professor Hufeland of Jena, in Germany.

Hence

Hence it would appear that there are only six out of a hundred, who stand a chance of living beyond 60 years.

Of persons who have lived above a hundred years, the industrious Haller has collected 1113 instances, and gives the following statement of the duration of their lives *.

Of those who lived from 100 to 110 years, the instances have been above

	-	-	-	1000
From 110 to 120 about	-	-	-	62
120 to 130	-	-	-	29
130 to 140	-	-	-	15
140 to 150	-	-	-	5
152 (Parr)	-	-	-	1
169 (Jenkins).	-	-	-	1

1113

But in a recent publication, the following table is given as the result of a more extensive collection of instances of longevity.

Of males and females, who lived from 100 to 110 years, both inclusive, the instances have been 1310

Above 110 to 120	-	-	-	277
120 to 130	-	-	-	84
130 to 140	-	-	-	26
140 to 150	-	-	-	7
150 to 160	-	-	-	3
160 to 170	-	-	-	2
170 to 185	-	-	-	3

1712†

* Haller's *Elementa Physiologiæ Corporis Humani*. Vol. VIII. lib. xxx. sect. 3. p. 103.

† See Easton on Longevity, printed an. 1799.

CONCLUSION.

Such is the substance of the observations which have occurred to me on this interesting subject. I shall conclude with remarking, that on the whole, it is more than probable, by proper attention and good management, persons in general, might not only live longer, but might enjoy life with more relish, than is commonly the case at present; and it is to be hoped, in respect of this, as well as of many other particulars, that human nature is still in the threshold of acquirement, that it will yet obtain greater and more important acquisitions of knowledge, and may reach further improvement, both with regard to the extent of personal and mental gratifications, which our species may be found capable of enjoying, and also the means of possessing them, with more satisfaction and comfort, and for a much longer period of time.

APPENDIX.

No. I.

THE preceeding observations are only intended as a basis, for the purpose of obtaining the additional facts and observations which are necessary to elucidate so important an inquiry. It is particularly requested, therefore, that the following questions may be answered with as much minuteness and accuracy as circumstances will admit of.

Questions for the consideration of those intelligent persons by whom this Paper may be perused.

1. What is the effect of the climate in which you reside, on the health and longevity of the human race?
2. What form is reckoned most conducive to health and longevity?
3. Is it found, that being descended from young and from healthy parents, is essential for good health and old age?
4. Is it found, that health and old age depends much on the disposition or temper of the individual?
5. Is there any perceptible difference in consequence of situation of life?
6. What professions are reckoned favourable to longevity or otherwise?
7. Is exercise or moderate labour found necessary for preserving health and long life?
8. Have the long-lived in general been in the marriage state?
9. Have the greatest proportion of the long lived consisted of males or females?
10. Have there been any instances of persons renewing their age, getting new teeth, new hair, &c.?
11. What

11. What are the other circumstances tending to promote long life?
12. What is the effect of diet on health and longevity?
13. What are the effects of clothing?
14. What the effect of habitation, and the difference of living in a town or in the country?
15. What are the effects of habits and customs, in regard to early rising, bathing, regular meals,—regular sleep,—and, in particular, what are those minute circumstances on which it is supposed that health and longevity principally depend?
16. What are the rules regarding medicine which are accounted the most useful and salutary?
17. What are the most remarkable instances of longevity, and how are they authenticated?
18. What are the rules adopted by those who have attained great age?
19. Have any tables of longevity been drawn up in your neighbourhood, and how do they agree with the one extracted from Hufeland?
20. Do any additional observations or particulars occur to you on the subject of health or longevity?

No. II.

Of such Rules and Habits as may contribute to the Preservation of good Health and long Life.

IF persons were to live with the simplicity of ancient times, it is probable that they would attain long life, without experiencing any material illness, merely by a proper attention to air, exercise, clothing, and diet. But in the present state of society, the great bulk of the community must follow, not a natural, but an artificial mode of life, and thence are perpetually exposed to various temptations, which they find it difficult always to resist, and to dangers which they cannot always avoid. In luxurious times, therefore, persons in general cannot

cannot expect to live long, at least with any degree of satisfaction, unless by great care, and by an attention to a variety of minute particulars, which they either learn from others, or acquire by their own experience. The mass of useful facts and observations thus accumulating every day, and perishing daily with those who had acquired them, must be very great. Unfortunately, hitherto, no individual has taken the trouble of collecting them. Such a collection would certainly be a most acceptable offering to the public, more especially if written in a plain and distinct manner, and laying down such rules alone as were practicable according to the general style of modern life. With the view of contributing to so useful a work, I shall proceed to state such observations as have been either communicated to me by others *, or have occurred to myself on that interesting subject.

The

* Among other communications I received from a friend in the country, a number of rules of diet and regimen, written in Latin as far back as the year 1648, in answer to the general question; “ By what means a person might be enabled to prolong life to the latest period ? ” The following is a literal translation of that Paper :

A person will be enabled to prolong life to the latest period, by observing the following salutary rules.

1. The stomach ought never to be over-loaded with food, otherwise the body will be rendered unfit for exertion.
2. Moderation in exercise, food, drink, sleep, and venery.
3. No fresh food should be taken, unless the preceding meal has been properly digested.
4. The meals should not be uniform ; but supper always lighter than dinner.
5. Excess in former meals must be corrected by a subsequent abstinence.
6. All food should be duly masticated before it be swallowed.
7. The quantity of drink should always be proportioned to that of solid food.
8. No drink should be taken until a due portion of solid food has been swallowed.
9. A variety of dishes ought not to be eaten at the same time.
10. It will be advisable to refrain from a meal (dinner) once a week, particularly when the body appears to require less food

11. Bodily

The particulars connected with food, clothing, habitation, air, and exercise, are so universally known, and the principles regarding

11. Bodily exercise should be so managed once a day, as to excite the natural heat (glow); and before a meal. The advantages resulting from such practice are thus described by FULGENTIUS: "Exercise," says he, "contributes to the preservation of human life, it dissipates all superfluous humours of a plethoric habit; it invigorates our faculties; it is a gain of time; the enemy of idleness, the duty of the young, and the delight of the aged. For exercise disengages and expels, through the pores, all superfluous humours; while the greatest injuries may ensue from a contrary conduct: hence the poet observes, "Ease is not to be acquired unless it be combined with toil. For indolence is generally attended with dissolution."
12. In taking food, liquids and soft substances ought to precede those of a dry and solid nature.
13. Between meals, both solid and liquid food should be avoided.
14. The bowels should be regular every day, either by nature or by artificial means.
15. Extremes of heat and cold, with respect to food, drink, and air, are equally to be guarded against.
16. Sleep ought not to continue less than six hours, nor exceed eight.
17. Immediately after a meal, and with a full stomach, it is hurtful to engage in reading, writing, or deep reflections.
18. Violent exercise, shortly after a meal, ought never to be undertaken.
19. When the body is in a languid state, all the limbs should be vigorously stretched.
20. Drink should never be taken on an empty stomach; as, in that state, it cannot fail to prove exceedingly hurtful by agitating the nerves. Galen says, in the second Aphorism, 21, if a hungry person drink wine before he eat, he will speedily be attacked with spasms and delirious symptoms. Nor should wine be taken (habitually) after meals; because it unnaturally accelerates the digestion, propels the food before it is properly digested, and lays the foundation of obstructions and putridity.

regarding each so fully established, that it is surely unnecessary to dwell upon them at any length.

In regard to food, experience will point out those articles, which are best adapted for the constitution of each individual, and there cannot be a better general rule than to adhere to them as closely as possible. It may be observed, however, that people in general, especially those who do not labour, eat much more than nature requires; that a little abstinence or self-denial may often be of use, either to prevent or to cure disease*; and at any rate, that none but hard-working people, or those who are in the very prime of life, or growing fast, or travelling about, should eat more than one full meal each day.

21. Wine should never be taken immoderately; and it would be advisable, as much as possible, to abstain from its use, because it affects the brain; hence, no person of a weak organization should venture to drink it, unless in small quantities, or diluted. Serapio remarks, "Wine fills the head with many vapours."
22. The bread should be of the best quality, soft, (not too stale,) and mixed with a small portion of salt.
23. Cheese, and all the artificial preparations of milk, ought to be avoided; though pure milk, when mixed with sugar, may not be deemed unwholesome during the summer. Milk and water, or whey, is a salutary beverage at all seasons.
24. Fish should be seldom eaten, and then they ought to be tender and well dressed, with the addition of vinegar, spices, and other sauces.
25. Oysters, and all shell-fish, should be avoided, because they afford only a cold, slow, and viscous nourishment."

There are many useful hints in these Rules, though some of them are not applicable to general use, according to the modern stile of living.

* After a disease is removed, if there is much lassitude and weakness, nothing will be found more useful than to take a crust of bread, and a glass of very old and rich sweet wine at noon. This plan was strongly recommended to me by some intelligent persons on the Continent, who had reaped much benefit from it.

As to clothing, much must depend on situation and climate*; but, on the whole, it is generally found a useful practice to wear woollens next the skin. It is remarked in many parts of Scotland, that since the use of flannel shirts has been given up by the lower orders, that the rheumatism, and other diseases formerly unknown, have become very frequent, and are daily increasing. In the West India Islands, if care be taken to make the troops wear flannel shirts, they are likely to be exempted from various disorders, which otherwise would probably have attacked them. Even the negroes themselves, I understand, prefer flannel to cotton or linen, and find it a much more comfortable and useful dress. In regard to clothing suited to the climate of Great Britain, there is reason to believe that we use furs much seldomer than we ought to do. Nothing can be more absurd than to consider the use of fur as a mark of effeminacy, and on that account to suppose that it is merely calculated for delicate women. In the piercing cold to which we are often subjected, furs might be worn with much advantage, by the stoutest and hardiest men.

The nature of the house where any individual resides, is a very important consideration. Formerly they were very ill fitted up, and were what would now be considered extremely uncomfortable. It was said of old, that no house was wholesome “where a dog could not get in under the door, or a bird through the window.” There was then no use for ventilators. The case is now much altered. The art of finishing houses closely, and the management of fuel, have been brought to such perfection, as greatly to exclude a free circulation of air, and to overheat that which the room contains. From the great expence of building and fitting up houses also, the apartments in them are in general much smaller, and less lofty than they ought to be. As it is impossible to make any great alteration in these particulars, more especially in the metropolis, and in large towns, which contain so large a proportion of the population of the kingdom, the only remedies

* See an Essay, Philosophical and Medical, by Dr. Vaughan, concerning Modern Clothing. Printed an. 1792.

are, to ventilate the houses whenever the weather will admit of it; and for the inhabitants of towns to be as much in the open air, and as frequently in the country, as circumstances will permit*.

In regard to exercise, it cannot be too much recommended; and as, from various circumstances, persons in large towns, and engaged in various sedentary occupations, cannot take all that exercise abroad that may be necessary for their health, they ought as much as possible to accustom themselves to be walking about even in their own house, instead of sitting so much as is usually the case. This rule is peculiarly necessary to be attended to by literary men; and though such a practice does not make up for the want of exercise abroad, yet it certainly is the best substitute for it.

But the principal object of any extensive paper on this subject, should be to point out those habits, or minute particulars, which contribute to good health and old age. We frequently see persons living luxuriously, and keeping even irregular hours, without being much troubled with disease. It is not improbable, were the truth known, that this is owing to trifling attentions, the result of observation and experience, which prove of infinite service to them, and which might be of equal advantage to others, were they collected by some public-spirited individual, and universally diffused.

I believe there is no habit that contributes more to good health and good spirits, or renders a man fitter for going through a great deal of business than that of taking a sufficient quantity of sleep, from six to eight, and even nine hours, if nature requires it. I understand that the late Lord Mansfield frequently inculcated the advantages to be derived from a rigid adherence to such a system; and it is well known the quantity of business he went through, and the good health and good spirits he enjoyed for a great number of years. To continue

* It has been remarked, that persons residing in Scotland in summer and in England in winter, generally enjoy excellent health; and it is believed that nothing would tend more to promote the health of the citizens of London, than an annual excursion to the mountains of Wales, or the Highlands of Scotland.

long in bed without sleeping, is weakening and injurious; but a person may take all the repose that nature requires, and will have time sufficient, during the remainder of the day, to go through all the necessary business, and to enjoy all the real pleasures of life.

It is generally supposed, that early rising is also essential to good health *. Without being an advocate for what are called fashionable hours, which are carried to so preposterous an excess, converting night into day, and day into night, some doubts may be expressed regarding the propriety of carrying the opposite system to too great a height. In ancient times, when people depended almost entirely on the sun for light, they were under the necessity of rising with that luminary, and of going to bed when it disappeared. Hence a prejudice arose in favour of that practice; but the case is greatly altered since the means of obtaining artificial light to so great an extent has been discovered. I question much, whether the morning air is so wholesome as many imagine. The sun must necessarily extract from the earth, when it first appears, a variety of vapours, which strong constitutions may withstand, but which must be injurious to weak ones: even in large towns, it is some time before the morning fogs are dissipated. On the whole, late rising cannot be approved of, but very early rising is not probably so essential for health as is commonly imagined.

There is nothing that can tend more to long life than for a person to obtain a complete command of his passions, and in particular to preserve his mind from being ruffled. Perhaps there is no maxim more likely to promote good health, than that of paying a proper attention to *temper, temperance, and sleep*. By good temper, the mind is preserved from disease; and by temperance, the body; and both the mind and the body, when exhausted, are again recruited and restored to their former strength, by a sufficient quantity of repose.

In so variable a climate as that of the British Isles, it is of

* The old maxim was,

Early go to bed, and early rise,
Makes a man healthy, wealthy, wife.

the utmost importance to contrive the most effectual means of preventing various disorders arising from checked perspiration, as colds, coughs, consumptions, sore throats, rheumatisms, &c. by which so many thousands are cut off every year. The following hints are the result of some attention to that particular subject.

1. It is generally acknowledged that the use of flannel next the skin is a great preservative against catching cold, and all the disorders connected therewith. This is a point so well established that it is unnecessary to dwell upon it*.

2. There is not a better mode of being able to withstand the variableness of our climate, than to adopt the Spanish practice of wearing an under waistcoat made of thin shamoy leather, which tends to preserve the body in an equal temperature. This is particularly useful when persons are in a weak state after indisposition, or are likely to be affected with rheumatic complaints.

3. Many persons are apt to be frequently attacked by complaints in the throat, which may, in general, be prevented by attention to the following circumstances. It is usual for persons to make use of hot water for shaving, the consequence of which is, that the glands of the throat are much relaxed, and very apt to be affected by cold. It has been found by experience an excellent custom to use cold instead of hot water, though the latter may be employed in warming the razor, which adds to the comforts of shaving. Persons apt to have sore throats, if they suspect they have caught cold, should, as soon as possible, gargle their throats with spirits, which may also be applied with much advantage to the outside of the throat.

4. Persons who hunt or ride much, are greatly exposed to get wet, and catch disorders in consequence thereof, of which multitudes of all ages have perished. The remedy, however, is a very simple one. Whenever such a circumstance hap-

* The principal objection to wearing flannel is its tendency to excite too great perspiration in bed; but this is easily obviated by wearing a flannel waistcoat with buttons at the shoulders, so that it can be taken off at any time without inconvenience.

pens, particularly to any person not accustomed to get wet, he should as quickly as possible rub his feet with a towel, dipt in rum or any other sort of spirits, the effect of which, in restoring the animal heat of the whole body is almost instantaneous. This practice, I understand, has been found of the greatest service abroad, and the great Frederick of Prussia recommended it strongly to his soldiers to adopt it, though, in general, they were much more inclined to drink their brandy than to make this use of it.

The next particulars which it may be proper to advert to, are the skin, the teeth, and the eyes.

It is well known that the health of the individual depends much upon the state of the skin, and that good health can never be enjoyed unless when it performs its functions properly. For that purpose, it is necessary that it should be kept in a clean state. The attention paid to this subject by ancient lawgivers and founders of religious systems, cannot be too much commended. They actually made the keeping the body clean, by frequent washing, part of the sacred duty of each individual. The use of linen, and the custom of throwing off the dress of the day, when going to sleep, (which is not the case with Asiatic, but fortunately is now so general with European nations,) renders bathing much less essential, but still the practice is too much neglected in this country; and in large towns furnishing the people with the means of bathing commodiously, ought to be a part of the general police *.

It is impossible too strongly to recommend an early and constant attention to the teeth. In former times, when persons lived with great simplicity, the teeth seldom failed, until the body was on the verge of dissolution; but now, it is hardly to be credited, how few pay such attention to their teeth as will preserve them in any tolerable order for a long period. This is the more surprising, as a good set of teeth is so ornamental, so essential for distinct pronounciation, and so necessary for a proper mastication of the food. In a paper of this de-

* The shower baths, and washing the body with wet sponges, have been found of great use in various complaints, and a great preservative against catching cold.

scription, it is only possible to touch upon this important subject. It may be proper, however, to observe, a common mistake, that tooth-brushes, as they are called, are intended for rubbing the teeth, whereas their proper business is to rub the gums, and to excite a circulation there. It is diseases in the gums that principally occasion the destruction of the teeth, and preserving the one in good order materially contributes to the safety of the other *.

The little attention that is shewn to the preservation of the eyes, is fully as blameable as the negligence above alluded to in regard to the teeth. Any imperfection in the sight is such a calamity, that every person of common prudence would certainly wish to prevent it by every possible means; and there is certainly no mode more likely to be effectual, than that of bathing them night and morning in a basin of cold water, and opening the eyes in the water. Any disorder that attacks the eye itself, from the pain and uneasiness which it occasions, must be attended to. But the eye-lids become often diseased and ulcerated, and though there are various ointments which would cure this disorder at the commencement, yet, as it is not very bad or troublesome, people are too apt to put it off from time to time, until the eye itself is affected, and a cure becomes hardly practicable.

It is imagined by some, that taking of snuff is a useful practice in preventing disorders in the head, and in the eyes in particular; and in the list subjoined of the In-pensioners in Greenwich Hospital who have exceeded the age of 80 years, a very large proportion use tobacco in some shape or other. The taking of snuff is certainly refreshing, and loaded as it is with a heavy tax, it still is a cheap luxury for the poor; and the evidence from Greenwich Hospital sufficiently proves, that the use of snuff and tobacco, though not to be universally recommended, yet is not incompatible with long life.

* Some people have their teeth so regular and well set, that little attention is necessary; but wherever there is any irregularity, nothing but the greatest care, and the skill of an able dentist, can preserve them long.

In a book published on the subject of longevity *, some circumstances are occasionally mentioned regarding the food and habits of persons who lived to a great age. Among these, the following seem to be the best entitled to notice ; “ 1. John Husley, of Sydenham, in Kent, who lived to be 116. For above 50 years his breakfast was balm tea sweetened with honey, and pudding for dinner, by the use of which he acquired long and regular health. 2. Judith Bannister, aged 108. She lived upon biseuit and apples, with milk and water, the last 60 years of her life. 3. John Riva, of Venice, aged 116, always chewed citron-bark. 4. Elizabeth Macpherfon, of the county of Caithness, aged 116. Her diet was buttermilk and greens. 5. Francis Confit, of Burythorpe, near Malton, Yorkshire, aged 150, occasionally eat a raw new-laid egg. 6. Fluellyn Price, of Glamorgan, aged 108. Herb teas were his breakfast, meat plainly dressed his dinner, and instead of a supper, he refreshed himself with a pipe of tobacco. 7. Val. Cateby, of Preston, near Hull, aged 116. His diet for the last twenty years was milk and biseuit. 8. Edward Drinker, of Philadelphia, aged 103. He lived on very solid food, drank tea in the afternoon, but eat no supper. 9. Lewis Morgan, of Radnorshire, aged 101. He lived chiefly on vegetable diet, and drank frequently of the famous rock water of Llandridod. 10. Mr. Smith, of Montgomeryshire, aged 103. He was never known to drink any thing but buttermilk. 11. William Riddle, of Selkirk, in Scotland, aged 116. For the last two years of his life, his chief subsistence was a little bread infused in spirits and ale. 12. Honourable Mrs. Watkins, of Glamorganshire, aged 110. For the last 30 years she subsisted entirely on potatoes. 14. Rebecca Joseph, of Monmouthshire, aged 100. Her chief subsistence, for the last two years of her life, was brown sugar and cold water. 14. Charles Maeklin, Esq. of London, aged 107. For the last 40 years of his life, his principal beverage was white wine and water, made pretty sweet ; and after he had lost his teeth, his food principally consisted of fish, eggs, puddings, and spoon meat.

* By Mr. James Easton, of Salisbury, printed in 8vo, *an.* 1799.

Having been attacked by a severe fit of the rheumatism, he discontinued the use of sheets, and slept in blankets. He used to be frequently rubbed all over with warm brandy or gin, (which seems to be a good practice for aged people,) and occasionally steeped his feet in warm water. It was his custom not to sleep on a feather bed, but on a mattress, on a couch without curtains, placed in the center of the room, upon which he reposed whenever he found himself sleepy. Instead of attending to regularity, he observed the dictates of nature, eat when hungry, drank when thirsty, and slept when nature seemed to require repose."

Among practices which might be of service to aged people, I should imagine that rubbing the body with oil would be particularly useful. It might tend to preserve the skin in a soft and healthy state, and to furnish the body with that unctuous matter, which very old people seldom have to the extent that is necessary; and hence those wrinkles which are so peculiar a characteristic of old age.

I am also persuaded, that in regard to various disorders, particularly those with which the aged are apt to be afflicted, a great source of benefit still remains to be explored, in the practice of electricity, by the use of which, not through the medium of violent shocks, but by gradually diffusing that important fluid throughout the whole frame, the body is re-animated with fresh vigour, and rendered fitter to go through its various functions with renewed spirit and strength.

There is certainly nothing that would tend more to preserve health and longevity, than improvements in the medical art, which, though it has made considerable progress in some particular departments, yet continues deficient in many others. When it is considered the number of able men who are employed in the medical profession, the importance of the objects to which their attention is directed, and the multitude of cases which are daily, and even hourly coming under their review, one would think that hardly a circumstance could possibly happen that might not be foreseen and guarded against. Perhaps one mode of improving the art would be, requiring all physicians to communicate to the College an account of

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any case that seemed to throw light upon the mode of curing any particular disease. Honorary premiums might be given to those who make any useful discovery ; and it is to be hoped that the munificence of Parliament to Dr. Jenner, will shew what may be expected by medical men who make any improvement of real and essential importance.

I shall conclude with observing, that man has been compared, and with some truth, to a machine ; but he ought not to be considered as a machine that wears out by mere use, without the possibility of being repaired ; but like one whose movements may be improved, whose wheels, after being disordered, may be again put into their former, and perhaps even an improved state, and whose frame may be long preserved by care, by attention, and by the ingenuity and exertions of skilful artists.

No. III.

On the Longevity of the Pensioners in Greenwich Hospital.

BEING convinced that much light would be thrown on the subjects of health and longevity, were accurate returns made from Hospitals and other public institutions, of the diet, age, and other particulars regarding the persons who resided in them, I was thence led to apply to Greenwich and Chelsea Hospitals for such information ; and it is with much pleasure that I subjoin the following important facts with regard to Greenwich Hospital, which Dr. Robertson, at the desire of the respectable Master of that most excellent Institution, (Lord Viscount Hood,) transmitted to me.

I propose, first, to give the Tables as prepared by Dr. Robertson, and then such observations as may occur on the results to be drawn from each of them respectively.

Names

<i>Age.</i>	<i>Names of Pensioners upwards of 80 Years of Age.</i>	<i>Where such Persons were born and educated.</i>	<i>If their Families were long lived.</i>	<i>How long in the King's Service.</i>	<i>Whether they lived in cold or warm Climate.</i>	<i>If ever married.</i>	<i>If in the habit of drinking freely.</i>	<i>If in the habit of using Tobacco freely.</i>	<i>The state of their Organs, and Mental Faculties.</i>	<i>The state of their Teeth.</i>
86	George Forbes.	Born and educated at Aberdeen, North Britain.	Not remarkable.	18 years.	Warm.	20 years.	Freely.	Snuffs freely.	Very dim-sighted. Hearing bad.	Bad Teeth.
85	Richard Oldston.	Born at Norway. No education.	Not remarkable.	32 years.	Cold.	60 years.	Moderate.	Never used tobacco.	Middling eye-sight. Hard of hearing.	Bad Teeth.
81	Peter Eager.	Cumberland, but removed to Ireland in his infancy.	Father 94—father's uncle 102.	14 years.	Warm.	50 years.	Very little.	Chews freely.	Rather dim-sighted. Otherwise good.	Very bad Teeth.
82	Edward Collins.	Born and educated at Barking, Essex.	Not remarkable.	36 years.	Cold.	40 years.	Very freely.	Chews freely.	Very dim-sighted. Otherwise good.	Middling Teeth.
82	George Diffiny.	Born and educated at Chiffwick, Middlesex.	Not remarkable.	20 years.	Both.	30 years.	Freely.	Chews freely.	Very dim-sighted. Otherwise good.	Middling Teeth.
83	William Wright.	Born and educated at Bristol.	Father 100—mother 90.	50 years.	Warm.	24 years.	Freely.	Smokes freely.	Very hard of hearing.	Middling Teeth.
92	Edward Skinner.	Born and educated at Dartford, Kent.	Father 94.	25 years.	Cold.	43 years.	Moderate.	Chews freely.	Very hard of bearing.	Bad Teeth.
98	Daniel McNeal.	Born at Campbelton, Argyleshire, N.B. and educated.	Not remarkable.	37 years.	Cold.	22 years.	Moderate.	Chews freely.	Ditto, and blind of one Eye.	Middling good Teeth.
82	Jeffrey Moore.	Born at Buntingford, in Hertfordshire, and educated.	Cannot tell.	16 years.	Cold.	22 years.	Very little.	Never used any.	Dim-sighted. Very infirm.	Bad Teeth.
87	Nathaniel Chapman.	Born at Taunton, in Somerset, and educated.	Not remarkable.	15 years.	Warm.	2 years.	Moderate.	Snuffs freely.	Dim-sighted. Very infirm.	Not a Tooth left.
81	Robert Hannaway.	Born at Edinburgh, and educated.	Grandfather 104, Grandmother 109.	21 years.	Mostly warm.	49 years.	Moderate.	Snuffs freely.	Very deaf. Otherwise very good.	Front Teeth pretty good.
102	John Moore.	Born at Castledions, in Cork, Ireland, and educated.	Grandfather 114, Father 105.	31 years.	Mostly cold.	60 years.	Pretty freely.	Chews freely.	Rather dim-sighted. 4 new Teeth—3 lost.	Bad Teeth.
91	Daniel Coughlan.	Born at Cork, in Ireland, and educated.	Not remarkable.	30 years.	Mostly warm.	40 years.	Moderate.	Snuffs freely.	Very good.	Good Teeth.
89	John Hutchins.	Born at Whitby, in Yorkshire, and educated.	Grandmother 105.	22 years.	Mostly warm.	45 years.	Moderate.	Chews freely.	Sight bad.	Not a Tooth left.
95	John Jackson.	Born at Aberdeen, in Scotland, and educated.	Father 100.	19 years.	Mostly cold.	50 years.	Freely.	Smokes freely.	Very short of breath.	Not a Tooth left.
83	John Blackwell.	Born at Clare, in Ireland, and educated.	Grandmother 105.	16 years.	Both.	60 years.	Freely.	Snuffs freely.	Very infirm.	Not a Tooth left.
90	John McPearson.	Born at Strontion, in Argyleshire, and educated.	Not remarkable.	22 years.	Mostly warm.	22 years.	Freely.	Smokes freely.	Very good.	Not a Tooth left.
94	Thomas Lauddown.	Born in Leadenhall-street, London, and educated.	Not remarkable.	14 years.	Mostly warm.	22 years.	Freely.	Chews freely.	Very dim-sighted.	Middling good Teeth.
80	James Archer.	Born at St. Alban's, Hertfordshire, and educated.	Not remarkable.	12 years.	Mostly warm.	14 years.	Freely.	Chews freely.	Very good.	Not a Tooth left.
85	Adam Maleum.	Born at Liberton, in Mid-Lothian, and educated.	Not remarkable.	14 years.	Mostly warm.	19 years.	Moderate.	Chews freely.	Dim-sighted and Palfy.	Not a Tooth left.
84	Thomas Vaughan.	Born at Barking, in Essex, and educated.	Not remarkable.	14 years.	Mostly warm.	34 years.	Freely.	Chews freely.	Quite blind. Otherwise good.	Not a Tooth left.
80	John Carbery.	Born at Rotherhithe, in Surrey, and educated.	Not remarkable.	14 years.	Mostly warm.	14 years.	Freely.	Chews freely.	Dim-sighted.	Not a Tooth left.
81	Isaac Rutter.	Born in Whitechapel, London, and educated.	Not remarkable.	21 years.	Mostly warm.	40 years.	Freely.	Smokes freely.	Very dim-sighted. Otherwise good.	Bad Teeth.
81	James Patch.	Born at Whitby in Yorkshire, and educated.	Not remarkable.	8 years.	Moderate.	30 years.	Freely.	Chews freely.	Very infirm. Very dim-sighted.	Bad Teeth.

<i>Age.</i>	<i>Names of Prisoners upwards of 80 Years of Age.</i>	<i>Where such Persons were born and educated.</i>	<i>If their Families were long lived.</i>	<i>How long in the King's Service.</i>	<i>Whether they lived in cold or warm Climates.</i>	<i>If ever married.</i>	<i>If in the habit of drinking freely.</i>	<i>If in the habit of using Tobacco freely.</i>	<i>The state of their Organs, and Mental Faculties.</i>	<i>The state of their Teeth.</i>
84	William Linnel.	Born at Cork in Ireland, and educated.	Not remarkable.	32 years.	Mostly warm.	20 years.	Freely.	Chews freely.	Dim-sighted. Very short of breath.	Bad Teeth.
84	John Gullam.	Born in South Wales, and educated.	Father 101. Grandfather 106. Grandmother 102.	20 years.	Mostly warm.	20 years.	Freely.	Chews freely.	Rather dim-sighted.	Bad Teeth.
86	Peter Richardson.	Born at Inveresk, Mid-lothian, N. B. and educated.	Mother 98.	22 years.	Moderate.	Never married.	Freely.	Chews freely.	Palsy in his head.	Not a Tooth left.
87	James Dawson.	Born at Rotherhithe in Surrey, and educated.	Grandfather 110.	18 years.	Mostly warm.	40 years.	Moderate.	Chews freely.	Very dim-sighted. Very infirm.	Not a Tooth left.
87	Francis Knight.	Born at London, and educated.	Not remarkable.	17 years.	Mostly warm.	60 years.	Freely.	Chews freely.	Good sight. Very good.	Not a Tooth left.
87	Richard Maddox.	Born at Dublin in Ireland, and educated.	Not remarkable.	60 years.	Mostly warm.	60 years.	Moderate.	Snuffs freely.	Dim-sighted. Otherwise good.	Bad Teeth.
86	Thomas Cooper.	Born at Leith in Scotland, and educated.	Not remarkable.	24 years.	Mostly warm.	11 years.	Very little.	Chews freely.	Sight pretty good. Good Appetite.	Bad Teeth.
90	John Bradley.	Born in the North of Ireland, and educated.	Not remarkable.	24 years.	Mostly warm.	Never married.	Moderate.	Chews freely.	Dim-sighted.	Bad Teeth.
94	Alexander Forbes.	Born in Aberdeen in Scotland, and educated.	Not remarkable.	42 years.	Moderate.	42 years.	Moderate.	Smokes freely.	Rather dim-sighted. Otherwise good.	Bad Teeth.
95	John Welch.	Born at Dalkeith in Scotland, and educated.	Not remarkable.	29 years.	Mostly warm.	Never married.	Freely.	Chews freely.	Very good.	Not a Tooth left.
95	Robert Caldwell.	Born at Leith in Scotland, and educated.	Not remarkable.	14 years.	Moderate.	Never married.	Freely.	Chews freely.	Very dim-sighted. Otherwise good.	Bad Teeth.
95	John Cummings.	Born at Limerick in Ireland, and educated.	Not remarkable.	25 years.	Mostly warm.	35 years.	Freely.	Chews freely.	Blind of one Eye. Otherwise good.	Bad Teeth.
82	Robert Pottle.	Born at Newfoundland, and educated.	Grandmother 118.	24 years.	Mostly cold.	26 years.	Moderate.	Chews freely.	Dim-sighted. Otherwise good.	Not a Tooth left.
89	George Taylor.	Born at Glasgow in Scotland, and educated.	Not remarkable.	33 years.	Mostly warm.	Never married.	Freely.	Chews freely.	Blind of one Eye. Otherwise good.	Bad Teeth.
85	Robert Toms.	Born at Winchester in Hampshire, and educated.	Not remarkable.	32 years.	Mostly warm.	Never married.	Freely.	Chews freely.	Very dim-sighted. Otherwise good.	Bad Teeth.
81	John Shuter.	Born in London, and educated.	Not remarkable.	14 years.	Moderate.	45 years.	Freely.	Chews freely.	Dim-sighted. Otherwise good.	Bad Teeth.
83	John Coverdale.	Born in Robinhood Bay, and educated.	Not remarkable.	18 years.	Mostly cold.	50 years.	Freely.	Chews freely.	Very dim-sighted. Very infirm.	Bad Teeth.
86	John Lloyd.	Born in Harfordwest, South Wales, and educated.	Not remarkable.	19 years.	Moderate.	40 years.	Moderate.	Chews freely.	Keeps his bed. Very infirm. Very dim-sighted.	Bad Teeth.
83	William Hunter.	Born at Antrim in Ireland, and educated.	Not remarkable.	30 years.	Mostly warm.	Never married.	Freely.	Snuffs freely.	Very dim-sighted. Very short of breath.	Pretty good Teeth.
87	Frederick Hufsey.	Born at Ashburton in Devonshire, and educated.	Not remarkable.	20 years.	Mostly warm.	40 years.	Freely.	Chews freely.	Very dim-sighted. Memory bad.	Bad Teeth.
81	William Brown.	Born at Somerset in Somersetshire, and educated.	Not remarkable.	15 years.	Mostly warm.	5 years.	Freely.	Snuffs freely.	Very deaf. Otherwise good.	Bad Teeth.
81	John Decamp.	Born in France, and educated.	Grand-uncle 95.	25 years.	Moderate.	10 years.	Moderate.	Snuffs freely.	Hard of hearing. Otherwise good.	Bad Teeth.
80	Edward Ferguson.	Born in London, and educated.	Not remarkable.	50 years.	Mostly warm.	15 years.	Freely.	Snuffs freely.	Eye-sight good. Very infirm.	Bad Teeth.
80	John Writt.	Born at Dundee in Scotland, and educated.	Grandfather 100. Grandmother 99.	25 years.	Mostly warm.	7 years.	Moderate.	Not any.	Rather dim-sighted. Rheumatism very bad.	Bad Teeth.

<i>Age.</i>	<i>Names of Penfioners upwards of 80 Years of Age.</i>	<i>Where such Persons were born and educated.</i>	<i>If their Families were long lived.</i>	<i>How long in the King's Service.</i>	<i>Whether they lived in cold or warm Climates.</i>	<i>If ever married.</i>	<i>If in the habit of drinking freely.</i>	<i>If in the habit of using Tobacco freely.</i>	<i>The state of their Organs, and Mental Faculties.</i>	<i>The state of their Teeth.</i>
80	Thomas Kindred.	Born at Dublin, in Ireland, and educated.	Grandfather 94.	32 years.	Mostly cold.	52 years.	Freely.	Chews freely.	Very dim-sighted. Very infirm.	Bad Teeth.
80	William Lee.	Born in St. James's, London, and educated.	Not remarkable.	20 years.	Mostly warm.	20 years.	Freely.	Chews freely.	Not sensible.	Bad Teeth.
81	William Gammon.	Born in London, and educated.	Not remarkable.	30 years.	Mostly warm.	35 years.	Freely.	Chews freely.	Eye-sight good.	Bad Teeth.
82	Thomas Grisley.	Born at Bishopgate, London, and educated.	Not remarkable.	21 years.	Mostly cold.	50 years.	Freely.	Chews freely.	Eye-sight good.	Bad Teeth.
82	John Mager.	Born at Wells, in Somersetshire, and educated.	Grandfather 92.	36 years.	Mostly cold.	Never married.	Moderate.	Not any.	Eye-sight very good. Very infirm.	Good Teeth.
82	John Biggs.	Born at St. Martin, London, and educated.	Grandf. 90. Father 78.	34 years.	Mostly warm.	9 months married.	Moderate.	Chews moderate.	Very good.	Bad Teeth.
84	John Wellers.	Born in London, and educated.	Grandfather 97. Uncle 98.	30 years.	Mostly warm.	33 years.	Freely.	Chews freely.	Rather dim-sighted. Very infirm.	Bad Teeth.
84	William Smith.	Born at Stepney, and educated.	Not remarkable.	3 years.	Moderate.	30 years.	Freely.	Chews freely.	Very good.	Bad Teeth.
85	Robert Padgett.	Born at Hammermith, Middlesex, and educated.	Not remarkable.	7 years.	Moderate.	40 years.	Freely.	Snuffs freely.	Very good.	Middling Teeth.
85	Thomas Fowler.	Born at Walthamstow, in Essex, and educated.	Not remarkable.	21 years.	Mostly cold.	Never married.	Moderate.	Not any.	Very dim-sighted. Otherwise good.	Very bad Teeth.
86	Will. Rowelington.	Born at Alderfgate, London, and educated.	Not remarkable.	56 years.	Mostly warm.	20 years.	Freely.	Chews freely.	Very good.	Good Teeth.
94	John Garvis.	Born at Kidderminster, in Worcestershire, and educated.	Uncle 98.	20 years.	Moderate.	40 years.	Moderate.	Snuffs freely.	Very dim-sighted. Very infirm.	Not a Tooth left.
82	John Beaves.	Born at Colton, in Devonshire, and educated.	Grandfather 90.	26 years.	Mostly warm.	35 years.	Freely.	Not any.	Very hard of hearing.	Middling Teeth.
90	Owen Murrey.	Born at Tyrone, in Ireland, and educated.	Grandfather 130. Father 100.	40 years.	Mostly warm.	16 years.	Freely.	Chews freely.	Very dim-sighted. Otherwise very good.	Bad Teeth.
86	Henry Hill.	Born at Bromley, in Surry, and educated.	Father 90.	25 years.	Mostly warm.	Upwards of 30 years.	Freely.	Not any.	Very good.	Middling Teeth.
83	James Hillhouse.	Born at Air, in Scotland, and educated.	Mother 85.	20 years.	Mostly warm.	About 17 years.	Moderate.	Very freely.	Rather dim-sighted.	Not one left.
84	Robert Griffiths.	Born at St. George's in the East, and educated.	Not remarkable.	30 years.	Mostly warm.	Never.	Moderate.	Chews freely.	Very dim-sighted, and deaf.	Bad Teeth.
80	Francis Hopkins.	Born at Gloucester, in America, and educated.	Not remarkable.	18 years.	Mostly warm.	Never.	Moderate.	Chews freely.	Very good.	Bad Teeth.
80	Isaac Smith.	Born at Whitehaven, in Cumberland, and educated.	Not remarkable.	20 years.	Mostly warm.	45 years.	Moderate.	Never used any.	Dim-sighted. Otherwise very good.	Very bad Teeth.
82	John Harford.	Born at Stokedameral, in Devonshire, and educated.	Grandmother 102.	28 years.	Moderate.	3 years.	Moderate.	Chews freely.	Good.	Very bad Teeth.
80	Thomas Griffiths.	Born at Swansea, in Wales, and educated.	Father 88.	27 years.	Moderate.	Never.	Freely.	Moderate.	Very good.	No Teeth these 20 years.
83	Nathaniel M'Nichols.	Born at Kilpouar, in the Highlands, and educated.	Not remarkable.	32 years.	Mostly warm.	6 years.	Moderate.	Not any.	Palsied upwards of 20 years.	Bad Teeth.
80	William Jeffrey.	Born at Stepney, and educated.	Not remarkable.	15 years.	Mostly warm.	52 years.	Moderate.	Chews freely.	Very good.	Bad Teeth.
81	Job Web.	Born at Exeter, and educated.	Grandfather 80.	48 years.	Mostly warm.	30 years.	Moderate.	Chews freely.	Very deaf. Otherwise good.	Bad Teeth.
81	William Durdon.	Born at Addey, in Devonshire, and educated.	Mother 85.	23 years.	Moderate.	12 years.	Moderate.	Not any.	Rather dim-sighted, rather deaf.	Middling Teeth.
81	Charles Mathews.	Born in Fifeshire, in Scotland; and educated.	Grandfather 100.	50 years.	Moderate.	20 years.	Moderate.	Not any.	Dim-sighted.	Middling Teeth.

Age.	Names of Penitents upwards of 80 Years of Age.	Where such Persons were born, and educated.	If their Families were long lived.	How long in the King's Service.	Whether they lived in cold or warm Climates.	If ever married..	If in the habit of drinking freely.	If in the habit of using Tobacco freely.	The state of their Organs, and Mental Faculties.	The state of their Teeth.
80	John Plant.	Born at Harrow, educated at Greenwich School.	His Uncle 86.	20 years.	Moderate.	36 years.	Very moderate.	Not any.	Very deaf.	Bad Teeth.
82	Stephen Hafler.	Born at Greenwich, educated at Greenwich School.	Not remarkable.	24 years.	Mostly warm.	49 years.	Very moderate.	Not any.	Rather dim-sighted. Otherwise very good.	Very bad Teeth.
81	James Godler.	Born at Stepney, and educated.	Not remarkable.	21 years.	Mostly cold.	22 years.	Moderate.	Not any.	Dim-sighted. Otherwise very good.	Bad Teeth.
90	Thomas Hacken.	Born at the Isle of Wight, and educated.	Grandfather and mother, each upwards of 100.	30 years.	Mostly cold.	11 years.	Moderate.	Chews moderate.	Dim-sighted, and deaf.	Middling Teeth.
88	Tub Hunter.	Born in Dublin, and educated.	Father 100. Aunt 124.	11 years.	Mostly warm.	50 years.	Freely.	Chews and swallows very freely.	Sight strong. Appetite good.	Very bad Teeth.
80	Henry Richards.	Born at Philadelphia, and educated.	Does not know.	32 years.	Mostly warm.	Never married.	Very freely.	Chews freely.	Rather deaf.	Bad Teeth.
80	James Dempsey.	Born in Stafford, but educated in Waterford, Ireland.	Not remarkable.	22 years.	Mostly warm.	40 years.	Moderate.	Not any.	Rather dim-sighted.	Very bad Teeth.
80	Alexander Cooper.	Born at Swansea, in Wales, and educated.	Grandfather 107.	32 years.	Mostly warm.	Never married.	Moderate.	Not any.	Very good.	Not a Tooth left.
80	Emmanuel Caryrefs.	Born at Chatham, and educated.	Mother 84.	12 years.	Mostly cold.	36 years.	Moderate.	Not any.	Very good.	Bad Teeth.
80	William Anderfon.	Born at Gatton Heights Swedland, and educated.	Father 101. Mother 100.	22 years.	Moderate.	7 years.	Moderate.	Chews freely.	Blind. Otherwise very good.	Middling Teeth.
80	George Weneman.	Born at Dublin, educated at York.	Grandmother 105. Grandfather 108.	25 years.	Mostly warm.	30 years.	Very freely.	Chews freely.	Very good.	Very bad Teeth.
83	David Smith.	Born at Fernel Angus, N.B. and educated.	Grandfather 103.	14 years.	Moderate.	20 years.	Freely.	Not any.	Very good.	Bad Teeth.
85	Robert Martin.	Born at Buckland, in Somersetshire, and educated.	Not remarkable.	30 years.	Mostly warm.	30 years.	Moderate.	Not any.	Very good.	Very bad Teeth.
82	Edward Smith.	Born at Galway, in Ireland, and educated.	Grand-uncle 109.	12 years.	Moderate.	60 years.	Moderate.	Chews very freely.	Very good.	Bad Teeth.
80	John Keith.	Born at Air, in Scotland, and educated.	Not remarkable.	11 years.	Moderate.	39 years.	Moderate.	Chews moderate.	Sight dim. Otherwise good.	Bad Teeth.
84	Henry Pike.	Born in St. Paul's Church-yard, and educated.	An Aunt 101. Uncle - 99.	24 years.	Mostly warm.	40 years.	Moderate.	Very moderate.	Pretty good.	Bad Teeth.
87	John Haddon.	Born in South America, and educated.	Grandfather 105.	48 years.	Mostly warm.	Never married.	Moderate.	Chews freely.	Very good.	Bad Teeth.
83	Joseph Bulger.	Born in Ireland, and educated.	Father 90.	20 years.	Moderate.	40 years.	Moderate.	Chews freely.	Pretty good.	Bad Teeth.
80	James Riley.	Born in the south of Ireland, and educated.	Not remarkable.	30 years.	Mostly warm.	Never married.	Freely.	Chews freely.	Sight dim. Otherwise good.	Pretty good.
80	John Rogers.	Born at Blandford in Dorsetshire, and educated.	Grandfather 98.	14 years.	Moderate.	50 years.	Freely.	Chews freely.	Sight dim. Otherwise pretty good.	Not one left.
83	John Hagard.	Born at Dorchester, and educated.	Not remarkable.	16 years.	Moderate.	49 years.	Freely.	Chews freely.	Sight dim. Good appetite.	Not one left.
94	Paul Blank.	Born at New York, and educated.	Father - 99. Mother 105.	65 years.	Mostly warm.	42 years.	Freely.	Very freely from 10 years old.	Very good.	Not a Tooth these 20 years left.

Observations on the above Table.

Doctor Jameson, of Bloomsbury-place, has made the following remarks on the preceding Table :

“ Dr. Robertson certainly deserves much praise for his attention in transmitting so particular a statement of the longevity of Greenwich Hospital; and if something similar could be procured from other public institutions in Great Britain and Ireland, it would not be difficult to form an arrangement of facts, that would afford important conclusions concerning the lives of mankind.

“ The Table communicated by Dr. Robertson favours an opinion, that the watery element is not unfriendly to the human frame, especially when it is aided in advanced life by the comforts of Greenwich Hospital.

“ The list of ninety-six men in that Hospital still alive, in extreme old age, is uncommonly great; and it appears from the table, that there is one man living above a hundred years old, and 13 above 90 years of age.

“ That the greatest number are natives of Scotland, and a large proportion from Ireland.

“ That one half belonged to aged families, many of whom had both parents very old.

“ That more than two-thirds had been upwards of 20 years in the King's service, and in various climates;

“ That they were almost all married, and four of them after 30 years of age.

“ That they almost all used tobacco, and most of them acknowledged the habit of drinking freely.

“ That the parts of the human body which had most generally failed, were the teeth. Some of them had no teeth for 20 years, and 14 only had good teeth.

“ That the organ of vision was impaired in about one half, and the organ of hearing in about a fifth part of them.”

As Doctor Robertson proposes publishing a new edition of his interesting work on the Diseases incident to Seamen, it was unnecessary to touch upon that branch of the inquiry. He has very obligingly, however, communicated the following additional observations, connected with the subject of longevity in general.

1. The number of In-pensioners being 2,410, and the number of those who are from 80 years of age and upwards being 96; the proportion of the aged to the whole is only as $\frac{16}{96}$ less than $\frac{1}{2}$.

2. Some use tobacco for particular complaints, which they think are relieved by the use of it, or use snuff; and the rest say that they cannot do without it.

3. John Moore (the oldest man in the house) says, that he has had four new FORE teeth within these five years; one of which he has lost he knows not how. This is commonly accounted a great mark of old age.

4. The proportion of aged marines is $\frac{12}{96}$, or $\frac{1}{8}$ of the whole number of persons above 80 years of age, in the Hospital.

5. The number of Out-pensioners is about 2,500, to whose ages when they were admitted, the number of years they have been on the list being added, it appears there are only 23 from 80 years of age and upwards; a sufficient proof of the great attention paid to the health of the In-pensioners at this excellent institution.

6. The number of ruptured men among the In-pensioners, on the 3d of May, was 161, or $\frac{1}{15}$, the number being 2410. the Out-pensioners, amounting to 2500, the number was only Among about 50, or nearly $\frac{1}{40}$.

ROYAL HOSPITAL AT GREENWICH.

Deaths of Pensioners from 1st January 1782 to the 31st December 1798, inclusive, the Complement being 2350.

<i>Year.</i>	<i>January.</i>	<i>February.</i>	<i>March.</i>	<i>April.</i>	<i>May.</i>	<i>June.</i>	<i>July.</i>	<i>August.</i>	<i>September.</i>	<i>October.</i>	<i>November.</i>	<i>December.</i>	<i>Number in each year.</i>
1782	16	19	15	21	24	31	18	16	16	16	17	19	228
—83	18	15	17	14	12	17	13	15	16	17	15	19	188
—84	17	25	21	25	22	14	13	6	6	10	10	17	186
—85	20	16	14	16	14	18	21	19	15	15	10	17	195
—86	11	20	20	12	13	20	8	18	15	17	24	8	186
—87	36	14	12	20	11	16	14	11	14	16	27	21	212
—88	13	15	22	20	13	11	16	15	15	14	12	26	192
—89	27	23	15	18	16	14	15	13	18	21	12	11	203
—90	15	12	10	14	22	11	15	21	10	13	21	15	179
—91	18	19	18	20	22	25	21	14	12	16	13	20	218
—92	21	15	24	11	14	16	13	12	12	13	17	20	188
—93	23	15	17	10	19	8	14	11	13	17	15	16	178
—94	33	15	13	16	14	17	16	14	19	13	13	26	209
—95	32	27	45	24	24	15	15	12	18	14	11	11	248
—96	19	13	10	23	17	12	8	13	10	13	12	23	173
—97	14	25	13	19	26	20	17	9	13	20	23	21	220
—98	18	21	25	20	20	17	15	16	17	14	15	24	222
Total	351	309	311	303	303	282	252	235	239	259	267	314	17)3425
													201 $\frac{8}{17}$

ROYAL HOSPITAL AT GREENWICH.

Deaths of Pensioners from 1st January 1799 to the 31st December 1801, inclusive, the Complement being 2410.

<i>Year.</i>	<i>January.</i>	<i>February.</i>	<i>March.</i>	<i>April.</i>	<i>May.</i>	<i>June.</i>	<i>July.</i>	<i>August.</i>	<i>September.</i>	<i>October.</i>	<i>November.</i>	<i>December.</i>	<i>Number in each year.</i>
1799	23	20	23	23	36	16	12	11	20	14	12	26	236
1800	25	19	17	19	8	15	7	15	26	23	19	15	208
1801	18	9	15	20	9	15	11	15	16	13	16	17	174
Total	66	48	55	62	53	46	30	41	62	50	47	58	3)618
													206

The following observations have occurred to Dr. Jamefon on the two preceding Tables.

That during the space of twenty years, the number of annual deaths was very similar, varying very little in any year, or in any month of these years. And as it appears no uncommon incident occurred during that time to alter the natural order, we have a tolerable certain estimate, which may be said to be 203 annual deaths out of 2400 pensioners.

That these men who were mostly in advanced years died in greatest number in the three winter months, reckoning December the first; and in the smallest proportion, in the three summer months, reckoning June the first, and that the spring was more mortal than autumn.

Viz. From November till March 1146.

— June 1087.

— Sept. 886.

— Dec. 924.

TABLE OF THE DIET AT GREENWICH HOSPITAL.

Days.	Bread. lb.	Beer. quarts.	Beef. lb.	Mutton. lb.	Butter. lb.	Cheefe. lb.	Peafe. p ^{ts}
Sunday	1	2	—	1	—	$\frac{1}{4}$	—
Monday	1	2	1	—	—	$\frac{1}{4}$	—
Tuesday	1	2	—	1	—	$\frac{1}{4}$	—
Wednesday	1	2	—	—	$\frac{1}{16}$	$\frac{1}{2}$	$\frac{1}{2}$
Thursday	1	2	1	—	—	$\frac{1}{4}$	—
Friday	1	2	—	—	$\frac{1}{16}$	$\frac{1}{2}$	$\frac{1}{2}$
Saturday	1	2	1	—	—	$\frac{1}{4}$	—
Total per week.	7	14	3	2	$\frac{2}{16}$	$2\frac{1}{4}$	1

Broth is made of the meat.

The diet of the sick varies at the discretion of the physician.

It appears by the Table of Diet, that the allowance is well calculated for the purposes of health, and very much resembles the victualling of his Majesty's navy, two banian days in the week.—The proportions of animal and vegetable food are equally balanced.

THE END.

